

CLASSIFICATION

CONFIDENTIAL

CENTRAL INTELLIGENCE AGENCY
INFORMATION REPORT

REPORT

CD NO. 25X1

DATE DISTR. 23 Jul 1954

NO. OF PAGES 3

NO. OF ENCLS.
(LISTED BELOW)

SUPPLEMENT TO
REPORT NO. 25X1

COUNTRY USSR

SUBJECT Kukrase, Estonia Oil Shale Mine

PLACE
ACQUIRED

DATE
ACQUIRED

DATE OF

THIS IS UNEVALUATED INFORMATION

25X1

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE
OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793
AND 794, OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR REVE-
LATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS
PROHIBITED BY LAW. THE REPRODUCTION OF THIS DOCUMENT IS PROHIBITED.

2. The director of the mine [redacted] was a Russian
named Zhukov, [redacted] Zhukov was a political figure,
the technical management being handled by a civilian Soviet engineer
[redacted] He was assisted by two German prisoners of
war who were engineers.

25X1

25X1

3. The personnel at the mine consisted of about one thousand prisoners of
war, all German, and about 250 Russians and Estonian workers, the largest
percentage of these being Estonian. There were only about 15 persons
employed in the administration department. All of the workers lived in
barracks at the mine.

4. The Kukrase mine was worked 24 hours a day, seven days a week. The only
days off [redacted] at Kukrase were November 7 and May 1,
both Communist holidays. Each worker put in from 10 to 16 hours a day,
depending on the special production days announced by the Communists. The
average civilian pay was about seven hundred rubles per month. If a miner
was a good worker he could make up to 13 hundred rubles per month. The
production norms, however, had been increased 10 carloads (10 metric tons)
a day [redacted] The average production per shift was
between eight hundred and nine hundred metric tons or about 27 hundred
metric tons per 24 hour period. On special work days this was increased
at times to as much as 36 hundred metric tons. A "stakhanovite" or forced
production figure of 130 metric tons was set for a two-man team.

25X1

25X1

25X1

CLASSIFICATION

CONFIDENTIAL

DISTRIBUTION

ORR EV

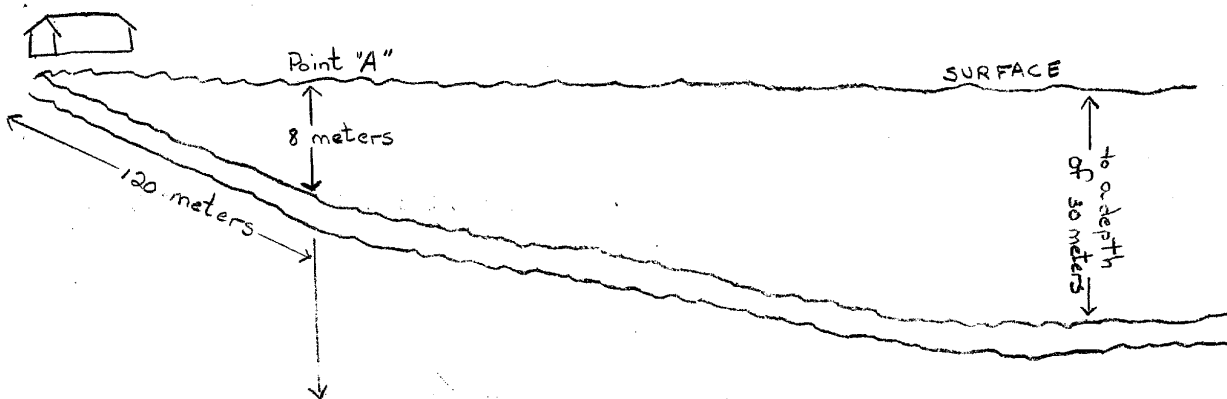
CONFIDENTIAL

25X1

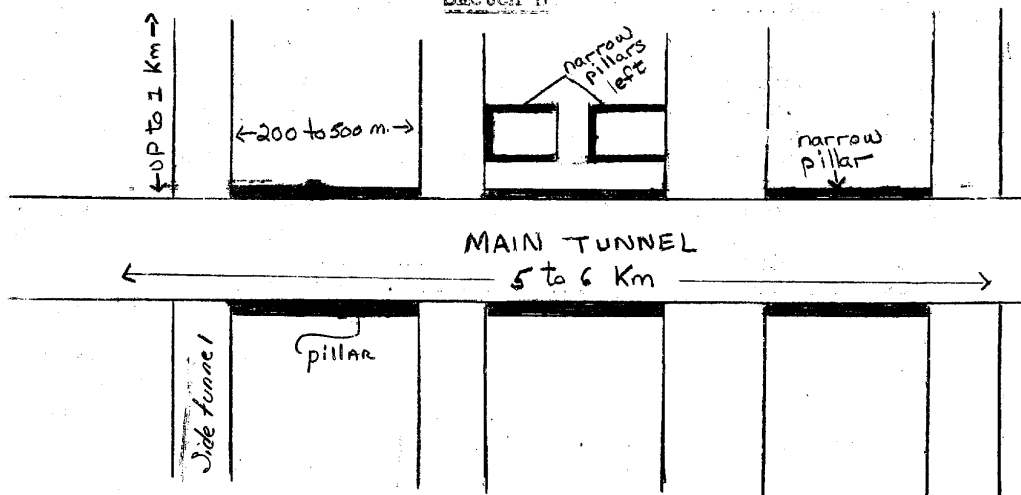
-2-

5. In 1948 the Kukruse mining activities covered an area about 12 km in length and three to $3\frac{1}{2}$ km in width. The actual mining, which was all underground, was conducted on the following plan:

Sketch A



Sketch B



6. The main tunnel as well as side tunnels were between $2\frac{1}{2}$ and $3\frac{1}{2}$ meters in height and six to seven meters in width. The main tunnel was between five and six km in length. The side tunnels, of which there were 14, measured up to one km in length. Number 8 tunnel caught fire in 1947 from a carbide lamp. It burned for about one year before the oil shale fire was extinguished. In places, up to five hundred meters were completely burned out along the tunnel. It was finally put out by blocking off the tunnel and ventilating shafts and smothering the fire. Two men worked in a team in removing shale. As an example of team mining, the two men would start off a side tunnel as follows: A tunnel would be started off a side tunnel towards the next side tunnel and would be dug about half way to the next side tunnel. It would then square off and when the tunnelling was completed all shale in the square would be removed, leaving only narrow pillars for support, usually about one meter wide. Additional support was provided by shoring up the tunnel with logs. This constant robbing of the shale caused the earth to sink up to six meters over much of the surface.

CONFIDENTIAL

CONFIDENTIAL

-3-

25X1

7. From 1945 to 1947 small deisel engines were used along the main tunnels to transport the carts. However, in 1947 small, 7½ ton electric trolleys were brought in (with overhead trolley system). These pulled from 20 to 25 one-ton (metric) carts each to Point "A" (Sketch A) where a 10-ton electric trolley took over and hauled the cars to the surface. Electrically operated, rubber conveyor belts were used in the working tunnels to convey the mined shale to the side tunnels where track was laid for the carts. There were eight or nine of these conveyor belts. The working arrangements were set so that one shift would blast and the other two load, these arrangements being staggered in each working area, so that all were not blasting or loading at the same time. This took care of the shortage of conveyor belts.
8. Mining equipment of the individual miner consisted of pick, shovel and carbide lamp. In 1946 a shipment of [] drills, cutters, lathes and other tools was received. [] manufactured dynamite was used from 1945 to 1947, after which [] used dynamite from Germany and the USSR. Spare parts for machines were very scarce. Such as [] did receive were procured from numerous, different points in the USSR. The mine was ventilated by fans and air shafts. There was no gas present in the mine. The powder smell and dust following blastings were easily removed. Water in the mine was a constant problem. It was usually knee deep. Although electric pumps were installed, during the Spring they were unable to handle all of the water in the mine. The accident rate was not high. From 1945 to 1948 there were 15 accidents from cave-ins.
9. The oil shale was not processed at the Kukruse mine but was transported to Kohtla Jarve where there was a large plant. [] One of the prisoners in [] camp who was working on another detail told [] he was working on a pipe line being laid from Kohtla Jarve to Leningrad. [] this line was about 1½ meters in diameter. [] the Soviets were using processed oil from the area for their submarines. All of the railroad locomotives in the area were using oil shale as fuel.
10. [] Kukruse was [] in 1951 Soviet political and criminal prisoners were replacing the German prisoners of war being released.

25X1

25X1

25X1

25X1

CONFIDENTIAL